



PATENT  
Attorney Docket No. 207198  
Client Reference No. 20763

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Saito et al.

Art Unit: 1644

Application No. 09/706,301

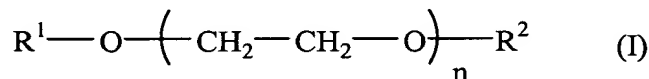
Examiner: G. R. Ewoldt

Filed: November 3, 2000

For: OIL ADJUVANT VACCINE

AMENDMENTS TO CLAIMS  
MADE IN RESPONSE TO OFFICE ACTION DATED NOVEMBER 1, 2002

1. (Amended) A W/O/W type oil adjuvant vaccine comprising (a) an inner aqueous phase comprising a biologically acceptable and effective amount of antigen, (b) an oil component phase which is in a liquid state at a temperature in the range of 15-25 °C, and (c) an outer aqueous phase comprising 0.5 - 20 wt% of a polyethylene glycol derivative



having a molecular weight of 400 - 20,000, which is represented by the following formula (I)

wherein  $R^1$  and  $R^2$  may be the same or different and each is a hydrogen atom or alkyl having 1 to 4 carbon atoms and  $n$  is a polymerization degree, ~~and an inner aqueous phase comprising a biologically acceptable and effective amount of an antigen~~, and wherein the inner aqueous phase is discontinuous and suspended in the oil component phase, and the oil component phase is discontinuous and suspended in the outer aqueous phase.

16. (New) The oil adjuvant vaccine of claim 1, wherein the outer aqueous phase comprises 1 - 5 wt% of the polyethylene glycol derivative of the formula (I).

17. (New) The oil adjuvant vaccine of claim 1, wherein the polyethylene glycol derivative of the formula (I) has a molecular weight of 3,000 - 9,000.